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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/607,515	06/26/2003	Dustin Kirkland	AUS920030349US1	6018
35525 7590 01/09/2007 IBM CORP (YA) C/O YEE & ASSOCIATES PC P.O. BOX 802333 DALLAS, TX 75380			EXAMINER LAFORGIA, CHRISTIAN A	
			ART UNIT 2131	PAPER NUMBER
SHORTENED STATUTORY PERIOD OF RESPONSE			MAIL DATE	DELIVERY MODE
3 MONTHS			01/09/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

# Office Action Summary

Application No.

10/607,515

Applicant(s)

KIRKLAND, DUSTIN

Examiner

Christian La Forgia

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 26 June 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 June 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 6/26/03.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_.

### **DETAILED ACTION**

1. Claims 1-20 have been presented for examination.

#### ***Information Disclosure Statement***

2. The information disclosure statement (IDS) submitted on 26 June 2003 is in compliance with the provisions of 37 CFR 1.97. Accordingly, the examiner has considered the information disclosure statement.

#### ***Drawings***

3. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference character(s) not mentioned in the description: Figure 1, item nos. 105 and 106, Figure 3A, item no. 341, Figure 3B, item no. 365. Corrected drawing sheets in compliance with 37 CFR 1.121(d), or amendment to the specification to add the reference character(s) in the description in compliance with 37 CFR 1.121(b) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

4. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: page 4, lines 22-27 and page 5, lines 7-8, as well as throughout the specification, refers to item no. 103 that does not

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appear in the drawings. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### ***Specification***

5. The use of the trademark Bluetooth has been noted in this application. It should be capitalized wherever it appears and be accompanied by the generic terminology.
6. Although the use of trademarks is permissible in patent applications, the proprietary nature of the marks should be respected and every effort made to prevent their use in any manner which might adversely affect their validity as trademarks.

### ***Claim Objections***

7. Claim 11 is objected to because of the following informalities: The claim recites "wherein the second wireless bridge device is configured to connected to an RJ-45 port of a wired local area network," which is grammatically incorrect. For the sake of Examination, the Examiner will interpret the claim as "wherein the second wireless bridge device is configured to be connected to an RJ-45 port of a wired local area network." Appropriate correction is required.

### ***Claim Rejections - 35 USC § 112***

8. The following is a quotation of the second paragraph of 35 U.S.C. 112:

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The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

9. Claims 4, 14, and 18 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claims 14 and 18 recites the limitation "wherein the bridge includes means for encrypting network packets and transmitting network packets." There is insufficient antecedent basis for this limitation in the claim, since it is unclear if the applicant is referring to the first wireless bridge or the second wireless bridge. For the purposes of examination, the Examiner will interpret the claim limitations as referring to the second wireless bridge.

10. Claim 9 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 9 recites the limitation "wherein the first device..." There is insufficient antecedent basis for this limitation in the claim, since no device is discussed in claim 8. For the purposes of examination, the Examiner will interpret the claim limitations as "wherein the first wireless bridge device."

11. Claims 3, 13, and 16 contain the trademark/trade name Bluetooth. Where a trademark or trade name is used in a claim as a limitation to identify or describe a particular material or product, the claim does not comply with the requirements of 35 U.S.C. 112, second paragraph. See *Ex parte Simpson*, 218 USPQ 1020 (Bd. App. 1982). The claim scope is uncertain since the trademark or trade name cannot be used properly to identify any particular material or product. A trademark or trade name is used to identify a source of goods, and not the goods themselves. Thus, a trademark or trade name does not identify or describe the goods associated with the

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trademark or trade name. In the present case, the trademark/trade name is used to identify/describe a short-range wireless protocol and, accordingly, the identification/description is indefinite.

***Claim Rejections - 35 USC § 103***

12. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

13. Claims 1-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,167,513 to Inoue et al., hereinafter Inoue, in view of U.S. 6,452,910 to Vij et al., hereinafter Vij.

14. As per claims 1, 8, and 15, Inoue teaches a data processing configuration, a method, and a bridge suitable for use in a data processing network, comprising:

a data processing system (Figures 3 [blocks 5a, 5b], 6 [blocks 2, 5a], 13 [blocks 23], 22 [blocks 2, 5a], 25 [blocks 2, 3 5a], 43 [blocks 2-1, 5a], column 20, lines 35-44, i.e. stationary or mobile node);

a network communication device of the data processing system enabling the system to communicate with a network, wherein the communication device provides a port suitable for receiving a network cable connector (Figures 3 [blocks 1a, 1b], 6 [blocks 1a, 1b], 13 [blocks 1], 22 [blocks 1a, 1b], 25 [blocks 1a, 1b], i.e. the stationary or mobile computers connected to the gateways as illustrated);

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a first bridge device having a connector suitable for insertion in the port (Figures 6 [block 4a], 13 [block 4, GWa], 22 [block 4a], 25 [block 4a], 43 [block 4a]), wherein the bridge device is configured to encrypt information received from the system according to a predetermined encryption algorithm and to transmit the information (Figures 6, 13, 22, 25, 43, column 20, lines 35-44, i.e. GWa converts it into the encryption/end-to-end authentication format, encryption link format from GW0 (or GWa) to GW1 (or GWb)); and

a second bridge device having a connector suitable for insertion into a network port (Figures 6 [block 4b], 13 [block 4, GWb], 22 [block 4b], 25 [block 4b], 43 [block 4b]), wherein the second bridge device is configured to receive information and to decrypt received information according to a decryption algorithm that is matched to the encryption algorithm of the first bridge device (Figures 6, 13, 22, 25, 43, column 20, lines 35-44, i.e. GWb converts the received encryption authentication format to IP format) wherein the first and second bridge devices communicate with each other exclusively (column 13, lines 27-32, i.e. master key shared between the packet encryption gateways).

15. Inoue does not teach where the bridges communicate wirelessly.

16. Vij teaches wirelessly connecting a personal area network and a local area network (column 1, lines 7-14).

17. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have the bridges communicate wirelessly, since Vij states at column 2, lines 34-38 that using wireless bridges allows for the seamless integration of wireless network links while still being flexible to adapt to different wireless technologies (column 1, lines 66-67).

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18. Regarding claims 2, 12, and 16, Inoue teaches wherein the first bridge device is configured to format the encrypted information according to a protocol prior to transmitting it (Figures 4D, 10-12, column 12, line 6 to column 13, line 20, column 20, lines 35-44, i.e. GWa converts it into the encryption/end-to-end authentication format, encryption link format from GW0 (or GWa) to GW1 (or GWb)) and wherein the second wireless bridge device is configured to un-format the protocol prior to decrypting it (column 20, lines 35-44, i.e. GWb converts the received encryption authentication format to IP format).

19. With regards to claims 3, 13, and 17, Vij teaches wherein the wireless protocol is selected from an IEEE 802.11 protocol and a Bluetooth protocol (column 2, lines 11-14).

20. With regards to claims 4, 14, and 18, Inoue teaches wherein the first wireless bridge device further includes means for receiving and decrypting information transmitted by the second wireless bridge and wherein the second bridge includes means for encrypting network packets and transmitting the encrypted packets (Figure 43, column 20, lines 35-44). Figure 43 illustrates that the steps disclosed at column 20, lines 35-44 can be reversed by showing the encryption link authentication format arrow going from GW1 to GW0.

21. Regarding claims 5 and 19, Inoue teaches wherein the encryption algorithm is based on an encryption key common to and embedded in the first and second bridge devices (column 13, lines 26-32).



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22. With regards to claims 6 and 20, Vij teaches wherein the encryption key is at least 128 bits (column 11, lines 13-19).

23. Regarding claim 7, at least figures 6, 13, 22, 25, and 43 of Inoue clearly show the first (GW1 or GWa) and the second bridge (GW2 or GWb) networked to at least the stationary computer or the mobile computer or both. **Newton's Telecom Dictionary**, hereinafter Newton, states that Ethernet is a local area network standard used for connecting computers, printers, workstations, etc. Newton also states that the first personal computer with Ethernet capabilities was shipped by 3Com on 29 September 1982. Newton states that network interface cards are solely used to connect a workstation to a LAN. Finally, Newton discloses that to connect to a local area network one must use a twisted pair RJ-45 cable. Therefore, since Inoue illustrates the gateways networked to computers, he discloses wherein the first and second bridge device connectors are RJ-45 compliant connectors and wherein the network communication device comprises an Ethernet compliant network interface card of the data processing device.

24. Regarding claim 9, Inoue teaches wherein the first bridge device is configured to connect to a network interface card (NIC) of a data processing system (figures 6, 13, 22, 25, and 43) by showing that the gateways are networked to the computers disclosed in Inoue. As discussed above, the sole purpose of a network interface card is to connect a workstation to a local area network.

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25. With regards to claim 10, Inoue teaches wherein the first bridge device includes an RJ-45 connector suitable for connecting to an Ethernet compliant NIC (figures 6, 13, 22, 25, and 43) by showing that the gateways are networked to other computers. As discussed above Newton discloses that in order to connect to a local area network (as discussed above Ethernet is the most commonly used standard for local area networks) one must use a twisted pair RJ-45 cable.

26. Concerning claim 11, Inoue teaches wherein the second bridge device is configured to be connected to an RJ-45 port of a wired local area network (figures 6, 13, 22, 25, and 43) by showing that the gateways are networked to other computers. As discussed above Newton discloses that in order to connect to a local area network (as discussed above Ethernet is the most commonly used standard for local area networks) one must use a twisted pair RJ-45 cable.

### ***Conclusion***

27. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

28. The following patents are cited to further show the state of the art with respect to connecting two networks wirelessly, such as:

United States Patent No. 6,240,514 to Inoue et al., which is cited to show a case related to the prior art used to reject the claims above.

United States Patent No. 6,163,843 to Inoue et al., which is cited to show a case related to the prior art used to reject the claims above.

United States Patent No. 5,548,649 to Jacobson, which is cited to show a network security bridge.

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United States Patent No. 7,095,748 to Vij et al., which is cited to show wirelessly interconnecting two networks.

29. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christian La Forgia whose telephone number is (571) 272-3792.

The examiner can normally be reached on Monday thru Thursday 7-5.

30. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ayaz Sheikh can be reached on (571) 272-3795. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

31. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Christian LaForgia  
Patent Examiner  
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A handwritten signature in dark ink, appearing to read 'CLF', with a large, stylized flourish extending from the bottom.

clf